Statement of Work 2013 Annual Report Program: Clearwater Fish Hatchery

Species: Spring and Summer Chinook and B-Run Steelhead

The LSRCP goals for the Clearwater Fish Hatchery are to return 11,915 adult (spring/summer) Chinook salmon and 14,000 adult steelhead above Lower Granite Dam. In addition to managing the Clearwater Hatchery the staff also oversees operations at (4) satellite facilities (Powell, Red River, Upper Crooked River, and Lower Crooked River) to achieve the LSRCP goals. Pertinent physical and biological data associated with all aspects of program operations will be collected. Program operations are detailed in the Clearwater River Annual Operating Plan (AOP).

<u>Objective 1 – Adult Chinook Trapping and Broodstock Development</u> Tasks:

Chinook Adult Returns to Clearwater Hatchery Satellite Facilities 2013

Chinook Fiduli Fotums to Gloai water Hat	Crooked River	Red River	Powell
Date of first return	06/06/2013	06/11/2013	06/06/2013
Date of last return	09/12/2013	09/04/2013	09/02013
Number of females returning	237*		118
Number of males returning.	869*		342
Number of unknown sex returning	7*		0
Date of peak returns	06/19/2013	06/19/2013	07/02/2013
Total trapped	208	898	460
Number released to spawn naturally above weir	24	58	6
Released to spawn below weir	0	0	0
Trap Mortality	0	0	0
Sport Fishery Out plant	0	0	0
Fish transferred from other traps	0	0	0
Female Number Spawned	195*		114
Pre-spawning mortality	20*		19
Fish transferred to other hatcheries	0	0	0
Fish given to Kamiah Food Bank	348*		125
Surplus Jacks Killed	281*		. 27

^{*} In 1997, Red River and Crooked River Chinook were combined to make the South Fork stock.

Objective 2 – BY 13 Spring and Summer Chinook Spawning Tasks:

Stock	Total Females	Females Kept	S Green Eggs Eyed Eggs		Percent Eye Up	Fecundity
McCall Summers	156	151	709,981	611,166	86.1	709,981
SF Summers	7	7	24,895	22,549	90.6	24,895
Kooskia (CLCr)	195	88	331,614	312,840	94.3	331,614
Powell	114	109	417,312	369,485	88.54	417,312
South Fork	498	477	1,806,424	1,728,946	95.71	1,806,424
Total/Average	970	832	3,290,226	3,044,986	92.54	3,290,226
RR/OX	72			245,722		
Total	1,042			3,290,708		

Objective 2 – BY 13 Steelhead Spawning:

	Total	Females	Green		Percent		
Steelhead Stock	Females	Kept	Eggs	Eyed Eggs	Eye Up	Fecundity	Comments
Durambal /CEUA	100	172	1 010 750	005 514	90.50	F 077	8 females culled for IHN or dead tray. 10
Dworshak (CFH)	190	172	1,010,760	895,514	88.60	5,877	females transferred back to DNFH 77 females worth not enumerated and outplanted directly to North Fork
Dworshak (MVH)	185	156	545,830	508,924	93.24	3,499	Clearwater redds. 19 females culled for
							39 females culled for IHN or dead tray at
South Fork Clearwater River	109	70	371.959	318,191	85.54	5.314	DNFH
Total/Average	484	398	,	1,722,629	89.13	4,896	

Objective 3 – Incubation and Rearing

Tasks:

- 1. Incubate and rear B-Run Steelhead eggs and fish.
 - a. Incubate and rear eggs and fish at appropriate lot levels. This was successfully accomplished with 83.0 % overall survival from eyed egg through fry stage for BY 12
 - b. Collect and record appropriate physical and biological data during incubation and rearing. Survival from eyed egg to stocking for BY 12 was 86.1%. The final entire hatchery average rearing densities were under 0.3 D.I.

STEELHEAD	BY12	BY13
FOOD FED & WEIGHT GAINED		
Period Fed: 10.01.12 to 9.30.13		
Feed Used (lb.) (LSRCP)	100,093**	35,881
Weight Gain (lb.)	109,223	40,879
Feed Purchased FY13	\$164,714.00	\$176,803.00
Conversion	0.92	0.88
** Portion of feed purchased in FY12		

- c. Address objectives for Nez Perce Tribe programs and work cooperatively implemented (including egg and fish transfers). Objective completed.
- d. One feed experiment or trial was conducted in FY 2013. This was a feed test for prevention of steatitis in Chinook. All fish in the trial eventually broke with steatitis, results were non-conclusive.

2. Marking and Tagging

a. Marking and tagging tasks will be addressed collectively in a stand-alone Statement of Work.

3. Fish Health

a. Fish Health tasks will be addressed collectively in a stand-alone Statement of Work.

4. Incubate and rear Spring and Summer Chinook eggs and fish.

- a. Incubate and rear eggs and fish at appropriate lot levels. This was successfully accomplished with 91.5 % overall survival from eyed egg through fry stage for BY 12.
- b. Collect and record appropriate physical and biological data during incubation and rearing. Survival from fry to Pre-smolt stocking for BY 12 was 99.42%. Survival from eyed egg to stocking for BY 11 was 75.6%. BY11 fish were evacuated from CFH to DNFH for final months of rearing following failure of primary pipeline August 15, 2012. The final entire hatchery average rearing densities were under 0.3 D.I.

CHINOOK FOOD FED & WEIGHT GAINED

	BYII	BY12	
Period Fed: 10.01.12-9.30.13			_
Feed Used (lb.) (LSRCP)	78,686	71,553	
Weight Gain (lb.)	68,226	69,108	
Feed Purchased FY13	\$106,350.25	\$182,800.29	
Conversion	1.15	1.04	

5. Marking and Tagging

a. Marking and tagging tasks will be addressed collectively in a stand-alone Statement of Work.

6. Fish Health

b. Fish Health tasks will be addressed collectively in a stand-alone Statement of Work.

Objective 4 – Juvenile Fish Releases

Tasks:

1. Annual release plans.

- a. Distribution of acclimated BY11 spring/summer Chinook smolts by CFH personnel began March 18, 2013 with the transport of smolts to Lower Selway direct release site and finished April 3, 2013 with transport of South Fork stock to the Red River Facility. Powell smolts were acclimated approximately 5 hours and released each day on March 20 and 21, 2013. Direct release plants occurred at Crooked River introducing the summer Chinook run at Crooked River. This is the third release of summer Chinook into the Clearwater basin. The release occurred on March 20, 2013 and consisted of 208,447 summer Chinook smolts (10,422 pounds). Transportation of CFH smolts to the Lower Selway River by CFH staff began on March 18, 2013 and finished on March 19, 2013. Smolts were transported to Red River between March 27, 2013 thru April 3, 2013 into the acclimation pond and held 5 hours to sunset and released. No overnight acclimation was attempted due to concerns of extreme ice conditions at the acclimation pond. A total of 2,507,135 smolts (125,088pounds) were transported and released from CFH. BY12 Chinook pre-smolts were transferred to NPTH on September 18, 2013 (270,207 smolts: 4,774 lbs.).for final rearing and release in spring of 2014.
- b. A total of 957,819 BY12 North Fork steelhead smolts were transported to three release sites from CFH on April 10, 2013, 121,648 to Newsome Cr., April 8 to 12, 2013, 627498 to Meadow Cr, and April 9, 2013 to Red House Hole. CFH staff, two Idaho Fish and Game transportation operators, and ten hatchery personnel with CDL's transported a total of 130,486 pounds of steelhead smolts.
- c. No unusual mortality was observed at transport time and no reports of delayed mortality were received as well.

<u>Objective 5 – Facility and Equipment Maintenance, Repair, Replacement Tasks:</u>

Maintain facilities and equipment.
 During the year the following projects were completed:

CONSTRUCTION PROJECTS

- Memorial tree planted in remembrance of Josh Huju
- Core drilled in early rearing vault and installation of control valve
- Summer Chinook ponds constructed
- Hand rails installed over fish weir at Crooked River

MAINTENANCE AND REPAIRS

- New gate at Residence 7
- Repaired Chinook Bank cat walks
- Prepared and painted Chinook Bank raceways
- Rebuilt Chinook Bank feeders
- Reinstalled Chinook Bank stairs
- Built cage to house propane bottles

- Seven stand pipes replaced
- Mow stripe poured for maintenance water valve
- Painted inside of Residence 2
- Soffits on Residence 1-7 painted
- Residence 3 floor repaired
- Residence 3 plumbing repaired for dishwasher
- Residence 6 kitchen floor repaired
- Residence 6 pee traps replaced in bathrooms
- Removal of three trees on the facility
- Fire hydrants painted
- Repaired three vat room valves
- Replaced six ballasts in vat room
- Resealed seals on trim of siding on Residence 1-3
- Repaired two eye wash stations
- Replaced the brake and replace three wheels on the Steelhead bridge
- Replaced 12 sections of the duct-o-bar
- Repaired feed tower belts for conveyors
- Installed new kitchen faucets in Residence 1 and 2
- Fire system in Residence 8 inspected and energized
- Fencing around Residence 8 completed
- Gutters installed at Residence 8
- Carport completed at Residence 8
- Landscaped Residence 4 and 8
- Added on to the existing patio at Residence 8
- New fan switch installed for oven fan in Residence 4
- Repaired fencing at Residence 6
- Built and installed privacy fencing between Residence 8 and 4
- Repaired adult holding grate
- Painted caution area in front of electrical panels
- Installed new electrical for pumps in early rearing
- Repaired plumbing in HVAC room in the Admin. Building
- Repaired toilet in the Admin. men's bathroom
- Replace the side brush on the street sweeper
- Installed the bumper on the shop truck
- Installed the snow plow on new ³/₄ ton truck
- Painted the 2 ton tanker
- Repaired the primary water intake pipe and screen
- Installed new mechanical interface for floating platform on the intake
- · Repaired the confined space hoist
- Repaired house alarms in Residence 4 and 5
- Residence 1-7 received mold renovation and new roof installation
- Installed new transformers for the electrical connection of the marking trailers
- Hepa-vac removal of rodent infected insulation at Powell cabin
- Installed antimicrobial insulation at Powell cabin
- New heat element for hot water heater installed at Red River
- Window shutters updated for fire escape safety at Red River, Powell and both Crooked River cabins
- Repaired and painted the pond walls at Red River

- Replaced pump and installed new rails and controls for septic lift station at Lower Crooked River cabin
- Painted Upper Crooked River cabin

NEW TOOLS AND EQUIPMENT PURCHASED

- New dishwashers for Residence 4 and 7
- New pellet stove for Residence 7
- New alarm system for water flow and temperature monitoring.
 - a. Annual IDFG and F&WS inventories were conducted by CFH staff.
 - b. An itemized and prioritized list of deferred maintenance needs was submitted.
 - c. Conduct annual safety inspections and submit findings to the LSRCP office by August 1 (checklist to be provided by LSRCP).
 Annual inspection conducted by Idaho State Building and Safety inspector Gary Brodner, 7.18.13
 - Annual inspection conducted by USF&WS safety inspector Allen Williams, August 19 through 22, 2013.
 - d. Conduct annual facility condition assessments and submit findings to the LSRCP office by August 1 (checklist to be provided by LSRCP). The last annual inspection conducted by USF&WS condition inspector Kim Hubbard, June 20 & 21, 2012 itemized list was submitted following that inspection.

Objective 6 – Administration, Budgeting, and Reporting Tasks:

- 1. Provide administrative oversight, develop and manage budgets, and meet reporting requirements.
 - a. Statement of Work and annual budget. Submitted to IDFG & LSRCP office in Boise, ID by due dates.
 - b. BY 2012 Steelhead and BY 11 Chinook Brood Year report completed and sent to IDF&G Fisheries Bureau for final editing.
 - c. Contribute to the development of the Clearwater AOP.

 Objectives accomplished by attending all three Clearwater basin AOP meetings and contributing to develop of AOP document.
 - d. Provide monthly inventory data to the LSRCP office by the 7th of each month. Objectives accomplished.
 - e. Provide a written facility annual report to the LSRCP office, including the standardized LSRCP production tables (to be provided) to the LSRCP office by December 31. A progress summary of all ongoing hatchery research projects will be included in this report. (Other information needs for this report, to be determined).
 - Annual Operations Report submitted to IDFG Fisheries Bureau 11.15.2013.